Amendments to the Claims:

Listing of Claims:

1. (Currently amended): A composition, comprising:

a pharmaceutically acceptable excipient; and

bacteria with an altered DNA adenine methylase gene ~~activity~~ wherein the altered DNA adenine methylase gene ~~activity~~ renders the bacteria non-pathogenic and further wherein the DNA adenine methylase activity is altered. ~~by altering the expression of the DNA adenine methylase (*Dam*) gene.~~

2. (Original): The composition of claim 1, wherein the bacteria are altered by an artificially engineered change in the bacteria's genome.

3. (Currently amended): The composition of claim 2, wherein the change in the bacteria's DNA adenine methylase gene ~~genome~~ is a change selected from the groups consisting of a deletion, an insertion and a mutation of a native sequence.

4. (Original): The composition of claim 1, wherein the bacteria are altered by a heterologous nucleotide.

5. (Original): The composition of claim 4, wherein the heterologous nucleotide is operatively inserted into a plasmid and expresses DNA adenine methylase.

6. (Previously presented): The composition of claim 1, wherein the bacteria are selected from the group consisting of *Escherichia*, Vibrio, *Yersinia*, and *Salmonella*.

7. (Previously presented): The composition of claim 6, wherein the bacteria are *Salmonella* bacteria selected from the group consisting of *S. typhimurium*, *S. enteritidis*, *S. typhi*, *S. abortus-ovi*, *S. abortus-equi*, *S. dublin*, *S.* gallinarum, and *S. pullorum*.

8. (Withdrawn): The composition of claim 6, wherein the bacteria are *E. coli*.

9. (Withdrawn): The composition of claim 6, wherein the bacteria are *V. cholerae.*

10. (Withdrawn): The composition of claim 6, wherein the bacteria are *Y. psuedotubercolosis*.

11. (Withdrawn): The composition of claim 1, wherein the bacteria are selected from the group consisting of *Shigella*, *Haemophilus*, *Bordetella*, *Neisseria*, *Pasteurella* and *Treponema*.

12. (Withdrawn): The composition of claim 1, wherein the bacteria are selected from the group consisting of *Neisseria meningitidis* and *Pasteurella multocida*.

13. (Withdrawn): The composition of claim 1, wherein the bacteria are *Haemophilus*.

14. (Original): The composition of claim 1, further comprising an adjuvant.

15. (Currently amended): An immunogenic composition, comprising:

a pharmaceutically acceptable excipient; and

live bacteria, said bacteria comprising an altered DNA adenine methylase ~~(Dam)~~ *dam* gene ~~activity~~ wherein ~~the~~ altered *dam* gene ~~activity~~ reduces virulence relative to the bacteria with wild-type ~~Dam~~ *dam* gene activity and further wherein the DNA adenine methylase gene alteration ~~activity is altered by altering~~ alters the expression of the DNA adenine methylase ~~(*Dam*)~~ *dam* gene.

16. (Original): The immunogenic composition of claim 15, wherein the Dam activity is altered by a heterologous nucleotide.

17. (Currently amended): The immunogenic composition of claim 15, wherein the Dam activity is altered by a mutation in the bacteria's genome which mutation alters ~~a gene involved in expressing Dam~~ the *dam* gene in a manner selected from the group consisting of reduced expression, no expression, overexpression, expression of a form of Dam altered from Dam native to the bacteria.

18. (Currently amended): An attenuated strain of a pathogenic bacteria, said bacteria containing a mutation in the regulatory or coding regions of the DNA adenine methylase (*Dam*) gene which alters Dam expression ~~activity~~ such that the bacteria are attenuated[[.]], said mutation selected from the group consisting of an insertion, a deletion, and a heterologous nucleotide containing a sequence corresponding to a *Dam* gene.

19. (Original): The attenuated strain of claim 18, wherein the mutation reduces Dam activity.

20. (Original): The attenuated strain of claim 18, wherein the mutation eliminates Dam activity.

21. (Canceled)

22. (Original): The attenuated strain of claim 18, wherein the mutation causes an increase in expression of Dam.

23. (Withdrawn): The attenuated strain of claim 18, wherein the bacteria is *Haemophilus*.

24. (Withdrawn): The attenuated strain of claim 18, wherein the bacteria are selected from the group consisting of: *E. coli*, *Shigella spp.*, *Vibrio cholerae*, *Yersinia spp.*, *Neisseria meningitidis*, and *Legionella pneumophila*.

25. (Withdrawn): The attenuated strain of claim 18, wherein the bacteria are selected from the group consisting of *Neisseria meningitidis* and *Pasteurella multocida.*

26. (Withdrawn): A method, comprising the steps of:

administering to a subject capable of generating an immune response a composition comprising a pharmaceutically acceptable excipient an immunogenic dose of altered bacteria with an altered DNA adenine methylase (Dam) activity which bacteria are attenuated; and

allowing the composition to remain in the subject for a time and under conditions to allow the subject to generate an immune response to the bacteria and produce antibodies specific to the bacteria subject.

27-30. (Canceled)

31. (Withdrawn): The method of claim 26, wherein the bacteria are selected from the group consisting of *Echerichia*, *Vibrio*, *Yersinia* and *Salmonella.*

32. (Withdrawn): The method of claim 26, wherein the bacteria are *Haemophilus.*

33. (Withdrawn): A method of eliciting an immune response in an individual, comprising:

administering an immunogenic composition to an individual in an amount sufficient to elicit an immune response wherein the composition comprises a pharmaceutically acceptable carrier and a genome characterized by a mutation altering DNA adenine methylase (Dam) activity such that the bacteria is attenuated;

allowing the composition to remain in the individual for a time and under conditions to allow the individual to generate an immune response.

34. (Withdrawn): The method of claim 33, wherein the bacteria is *Haemophilus.*

35. (New): A substantially pure culture of a pathogenic bacteria selected from the group consisting of: *Shigella spp.*, *Vibrio spp.*, *Yersinia spp.*, *Neisseria spp.*, *Legionella pneumophila, Echerichia spp.*, *Salmonella spp. Haemophilus* spp. *Neisseria* spp., *Pasteurella spp. and Pasteurella spp.*, said bacteria comprising an exogenous polynucleotide sequence encoding and overproducing Dam methylase, whereby the bacteria is attenuated.